Designing of New Facility at National Aeronautical Laboratory, Bangalore to read black box data

874. SHRI HARVENDRA SINGH HANSPAL; Will the PRIME MINISTER be pleased to state:

(a) whether the scientists at the National Aeronautical Laboratory, Bangalore have designed a new device to read the black box data in aircraft a vital source of information in the event of a crash;

(b) if so, what are the salient features of the said device;

(c) whether Government have decided to examine the black box of the ill-fated A-320 airbus which crashed near Bangalore on the 14th February, 1990 through Scientists of the National Aeronautical Laboratory; and

(d) if not, what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M. G. K. MENON): (a) Yes, Sir.

(b) The black-box (DFDR) read out facility that NAL has developed conforms to ARINC-573 standards and caters for Boeing 747 and Airbus **300** operated by Air India. The data is recorded in Harvard bi-phase code at a bit rate of 768 bits per second constituting a subframe. Each subframe has different aircraft parameters represented digitally by a 12 bit word. The interfere unit enables data in the DFDR to be regenerated through **a** PDP-11/44 computer at Air India.

(c) and (d) Both the DGCA and NAL have the Cockpit Voice Recorder (CVR) decoding facility. DGCA decoded the CVR of the ill-fated A-320 airbus which crashed near Bangalore on the 14th February, 1990. Digital Flight Data Recorder (DFDR) decoding facility developed by NAL for Air India is not compatible to decode the DFDR used in the A-320 aircraft. Hence the Government of India decided to have the DFDR decoding done abroad.

Visit of **French Armament Company SOFMA's representative to Delhi**

875. SHRI PA WAN KUMAR BAN-SAL; Will the PRIME MINISTER be pleased to state:

(a) whether a representative of the French Armament Company SOFMA came to Delhi recently; and

(b) if so, what was the purpose or the visit and the subject of his meetings with the officials of Government of India?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. RAJA RAMANNA): (a) and (b) A representative of M/s. SOFMA of France visited New Delhi in January, 1990 for discussions connected with some Naval Projects.

कुल राष्ट्रीय आय का शिक्षा पर खर्च का प्रतिशत

876. सरदार जगजीत सिंह अरोड़ा :
श्री राम जेठमलानी :

क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या यह सच है कि कोठारी आयोग ने 1966 में यह सिफारिश की थी कि कुल राष्ट्रीय आय का छः प्रतिशत शिक्षा पर खर्च किया जाना चाहिए ;

(ख) यदि हां, तो क्या यह भी सच है कि विगत के वर्षों में अपनाई गई शिक्षा नीति में इस सिफारिश को भी स्वीकार किया गया है ; और

(ग) यदि हां, तो गत दो वर्षों के दौरान प्रत्येक वर्ष में शिक्षा पर कुल राष्ट्रीय आय का कितना प्रतिशत खर्च किया गया है ?